

## **Project 3: Telling Stories with Data**

### **Insight 1**

#### **Link:**

[https://public.tableau.com/views/Cancellationsbyairlineairportstate/Cancellation?:language=en-US&publish=yes&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/Cancellationsbyairlineairportstate/Cancellation?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link)

#### **Summary:**

Which airlines/airports/states have the most cancellations?

1) From the bar chart, we can see that Southwest Airlines Co. has the most cancellations (818), closely followed by Atlantic Southeast Airlines with 800 cancellations, while Hawaiian Airlines Inc. has the least flight cancellations (8).

2) From the bar chart, we can see that “Chicago O'Hare International Airport” ORD has the most cancellations (454) followed by “Dallas/Fort Worth International Airport” DFW (342).

3) From the bar chart, we can see that most cancellations occur in Texas (668 out of 32,612 flights) and Illinois (563 out of 19,678 flights). The least cancellations occur in “DE” Delaware (0 out of 6 flights) and “AS” American Samoa (0 out of 2 flights).

#### **Design:**

Bar chart is used to simply show the comparison between different variables (airline/airport/state) against sum of cancellations. A filter of months is added to show the results of certain months. We choose to color the bars with blue as it is used for comparative analysis of flight cancellations, taking into consideration of colorblindness people. Doing something like red, yellow and green would be distracting the viewer from important insights.

**Resources:** N/A

## Insight 2

### Link:

[https://public.tableau.com/views/Cancellationsbyairlineairportstate/cancellationreasons?:language=en-US&publish=yes&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/Cancellationsbyairlineairportstate/cancellationreasons?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link)

### Summary:

What causes delays/cancellations?

From the pie chart, we can see that most cancellations happen due to the weather (2,397).

### Design:

Pie chart is used to show the categorical data as each slice can represent a different reason of flight cancellation (weather/airline/air system).

**Resources:** N/A

## Insight 3

### Link:

[https://public.tableau.com/views/Cancellationsbyairlineairportstate/cancbymonthday?:language=en-US&publish=yes&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/Cancellationsbyairlineairportstate/cancbymonthday?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link)

### Summary:

Which month/day have the most cancellations?

From the line chart, we can see that in 2015, February is the month with the most cancellations (1,058) followed by January (605), while September has the least cancellations (108).

We also can see that most cancellations happen on Monday (1038) while Friday has the least cancellations (379).

### Design:

Line chart is used to simply show the relation between the two variables, sum of cancellations and months/days.

**Resources:** N/A